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PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-001006

(43)Date of publication of application : 06.01.1999

(51)Int.CI.

B41J 2/21
G06F 3/12

(21)Application number : 09-155515

(71)Applicant : CANON INC

(22)Date of filing : 12.06.1997

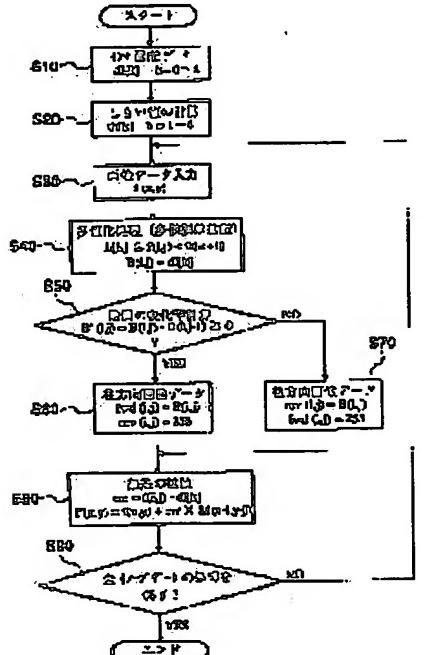
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(54) RECORDING APPARATUS AND RECORDING METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To record images having a density gradient with high quality, by generating recording data so that a direction in which a gradation changes from a high density to a low density is a record scan direction, selecting ink of a density according to a density value specified by the recording data, and recording images with the ink.

SOLUTION: Ink density data are read out from a ROM, and an ink and an image data density value are made to correspond to each other (S10). A threshold value for switching an ink to be used is calculated (S20). Image data are input (S30). A multilevel error diffusion process is carried out in a record scan direction, and each pixel density value is converted into a multilevel value (S40). A change rate of density gradients of adjacent multivalued data is obtained (S50). Forward scan record image data and rearward scan record image data are formed (S60, S70), and an error diffusion process is executed (S80). Record multivalued data in a forward and a rearward scan directions are converted to ink discharge control data respectively and output to a recording head. Since the ink is switched to a smaller density, discontinuity of dot densities when the ink is switched becomes difficult to see.



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[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision]



of rejection]

[Date of requesting appeal against examiner's
decision of rejection]

[Date of extinction of right]

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